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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/896,761	07/02/2001	Marcel F.C. Schemmann	US010310	2010
24737	7590	05/07/2004	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			TRAN, DZUNG D	
			ART UNIT	PAPER NUMBER
			2633	

DATE MAILED: 05/07/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/896,761	<b>Applicant(s)</b> SCHEMMANN ET AL.	
	<b>Examiner</b> Dzung D Tran	<b>Art Unit</b> 2633	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☒ Responsive to communication(s) filed on 02 July 2001.

2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) ☒ Claim(s) 1-26 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

6) ☒ Claim(s) 1-26 is/are rejected.

7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on 01/08/2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All    b) ☐ Some \*    c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date 4,7.

4) ☐ Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Specification***

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Levinson et al. US publication no. 2002/0129379 in view of Little US patent no. 5,267,071.

Regarding claims 1, 10 and 17, Levinson discloses an apparatus for communicating radio frequency (RF) informational signals having a RF power level, through an optical link medium (figures 7, 9), said apparatus comprising:

a first conductor (106) adapted to carry said informational signals as electrical signals into the apparatus;

a RF level sensor (a signal processing logic 204 that is included sensor 226) operatively coupled to the first conductor (106), adapted to measure the RF power level and to output a control signal according to said RF power level (figure 8);

a first RF variable gain amplifier (203) adapted to be operatively controlled by the control signal, and adapted to amplifying the electrical signals from the first conductor prior to being communicated through said optical link medium (page 4);

a transmitter (208) adapted to transmit the electrical signals as optical signals into the optical link medium (210);

a receiver (252) adapted to receive the optical signals from the optical link medium, said receiver being operatively coupled to a second conductor adapted to carry said informational signals as electrical signals out of the apparatus (page 7). Levinson differs from claim 1 of the present invention in that Levinson only discloses a first RF variable gain amplifier adapted to be operatively controlled by the control signal and adapted to amplifying the electrical signals from the first conductor prior to being communicated through said optical link medium, he does not specific discloses an RF attenuator adapted to be operatively controlled by the control signal, and adapted to attenuate the electrical signals from the first conductor prior to being communicated through said optical link medium. Little, in the same field of endeavor, discloses an apparatus having the RF power detector (214) and send the control signal to the attenuator (204, 205, 215, 216) attenuating the electrical signals from the first conductor prior to being communicated through said optical link medium. Since optical attenuator is well known for attenuating the signal light, it would have been obvious to an artisan at the time of the invention was made to include the attenuator of Little in a the apparatus of Levinson in order to control or maintain the intensity of the RF signal. Furthermore, attenuator or amplifier is well known in the art for equalizing the power of the system.

Regarding claims 2 and 20, Levinson further discloses a first RF amplifier (203) adapted to be operatively controlled by the control signal, and adapted to amplify the

electrical signals from the first conductor prior to being communicated through said optical link medium (page 7).

Regarding claims 3, 4 and 5, whether to impose or add the control circuit having a RF attenuator for attenuating the electrical signals from the conductor before transmitter or after the receiver or the attenuating power level is merely an engineer design choice.

Regarding claim 6, Levinson further discloses wherein the control signal is communicated through said optical link medium, and further comprising a second RF attenuator operatively coupled to the receiver and adapted to be operatively controlled by the encoded control signal, and adapted to attenuate the electrical signals on said second conductor, and further comprising a second RF amplifier operatively coupled to the receiver and adapted to be operatively controlled by the control signal, and adapted to amplify the electrical signals on said second conductor (figures 7, 8, 9, 10, page 7, 8).

Regarding claims 7 and 9, whether to impose or add the control circuit having a RF attenuator for attenuating the electrical signals from the conductor before transmitter or after the receiver is merely an engineer design choice.

Regarding claims 8, 13-16, 18, 21 and 26 whether to attenuate or amplify the RF power level for equalizing the power of the system is merely an engineer design choice.

Regarding claim 11, Levinton further discloses the sensor output is adapted to be transmitted to the RF receiver (figure 10, page 7).

Regarding claims 12, whether to impose or add the control circuit having a RF attenuator for attenuating the electrical signals from the conductor before transmitter or after the receiver or the attenuating power level is merely an engineer design choice.

Regarding claims 19 and 25, Levinson further discloses the optical transmission system is a cable television (CATV) system (abstract, page 3).

Regarding claim 22, Levinson further discloses the improved SNR allows for better system performance (page 2).

Regarding claims 23 and 24, whether to attenuating or amplifying the RF power is merely an engineer design choice.

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Blauvelt et al. U.S. patent no. 5,453,868. Suppresion of noise and distortion in fiber optic system.

b. Moris U.S. patent no. 5,523,875. Automatic gain control circuit

c. Chbat et al. U.S. publication no. 2002/0141008. Method and system for reducing degradation of optical signal to noise

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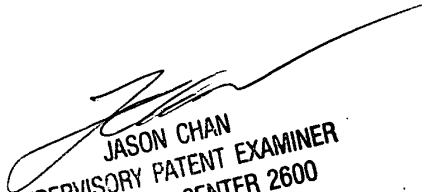
Art Unit: 2633

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dzung Tran whose telephone number is (703) 305-0932.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Jason Chan, can be reached on (703) 305-4729.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

  
JASON CHAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600